

Patent Abstracts of Japan

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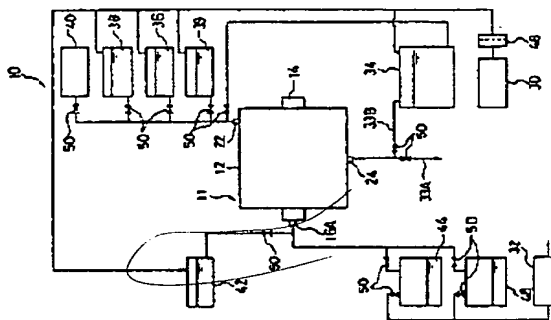
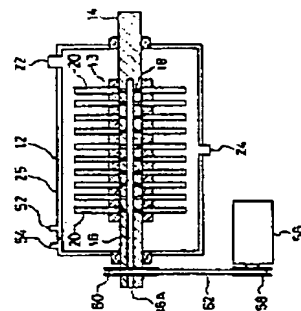
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APPLICANT : TOTO LTD;

INVENTOR : MAEHASHI NOBUYUKI;

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TITLE : METHOD FOR CULTURING CELL AND  
APPARATUS THEREFOR



ABSTRACT : PURPOSE: To culture a large amount of cells at a high density by feeding a fresh culture solution through a through hole formed in a supporting shaft into a hermetically closed container, supplying nutriments and oxygen to cells stuck to perforated plates of a filter unit communicating with the through hole and simultaneously removing waste products.

CONSTITUTION: Steam is fed from a boiler 40 through an inflow port 22 into a hermetically closed container 12 to carry out empty sterilization. Warm water is then circulated from warm water feed port 52 to a jacket 25 of the container 1 to keep the container 12 at a prescribed temperature. A compressor 30 and a vacuum pump 32 are then operated to feed cells from a seed cell vessel 34 into the container 12 and a culture solution is simultaneously fed from a storage tank 39 into the container 12. A buffer solution is subsequently fed from a storage tank 36 through the inflow port 22 into the container 12. The culture solution is then taken out through perforated plates 20 and a through hole 16 in a rotating shaft 14 to stick the cells to the surfaces of the perforated plates 20. A fresh culture solution containing nutriments and oxygen is subsequently fed into the container 12 to supply the nutriments and oxygen to the cells and the culture solution containing waste products is simultaneously taken out through the perforated plates 20 and the through hole 16.

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